

REMARKS:

Applicant acknowledges receipt of the Office Action dated February 5, 2008, in which the Examiner objected to the Drawings; objected to claims 2, 3, and 4; rejected claim 6 under § 112, second paragraph; rejected claims 1, 3-4, 6, 8-9 and 11 as anticipated by Hawthorne (EP 0119338); rejected claims 2 and 10 as obvious in view of the combination of Hawthorne with Blange 2002/0079998; and rejected claims 5 and 6 as obvious in view of the combination of Hawthorne with Woodson (US 4815241).

Applicant respectfully traverses the rejections for the reasons set out below.

Objection to the Drawings

The Drawings have been amended to label the supply channel “24” and to label the included angle “ β .” The specification has been amended to reflect these changes. A Replacement Sheet of drawings is included herewith. Applicant submits that these amendments cure the basis for the Examiner’s objection.

Objected to claims 2, 3, and 4

Claims 2, 3, and 4 have been amended to provide antecedent bases for the cited phrases.

Rejection of claim 6 under § 112, second paragraph

Claim 6 has been cancelled.

Rejection of claims 1, 3-4, 6, 8-9 and 11 as anticipated by Hawthorne

Applicant respectfully submits that Applicant does not follow this rejection and respectfully requests that the Examiner present it differently. Specifically, the Examiner states that, “*The first nozzle 9 has an inside wall aligned with an inside wall of the mixing zone 10 in that the faces of 9 and 10 are in line with each other, or when their center-lines lie on the same axis [see Fig. 1].*” The meaning of this statement is not clear. According to Hawthorne, no part of the wall of nozzle 9 aligns with any part of the wall of mixing chamber 10. The fact that nozzle 9 and mixing chamber 10 are co-axial is not relevant to the claim limitation in question.

Nonetheless, to further clarify the intended meaning of claim 1, claim 1 has been amended to further recite that the first nozzle “has an inside wall aligned with an inside wall of the mixing chamber *and also aligned with an inside wall of the second nozzle.*” (emphasis added). Thus, claim 1 clearly requires that at least one of the walls of the chambers through

which the fluids must pass provides a linear flow path, inasmuch as one wall of the first nozzle, the mixing chamber, and the second nozzle are aligned. Hawthorne does teach or suggest a device meeting this limitation.

Applicant respectfully submits that the balance of the claims depend from claim 1 and are therefore allowable over Hawthorne for the reasons set out above.

With regard to claim 3, particularly, Applicant again traverses, and respectfully submits that the Examiner's statement regarding Hawthorne is inaccurate. First, Hawthorne teaches that "the distance between the outlet end of the water nozzle and the outlet end of the insert 17 is preferably not more than about 250 mm." Because this measurement includes all of the length of outlet 18, it does not provide any information about the length of mixing chamber 10. Second, mixing chamber 10 is not, as stated by the Examiner, "defined by wall 16 of nozzle insert 17." The length of mixing chamber 10, as that term is defined in the present specification and claims, is equal to the distance between the outlet of nozzle 9 and the inlet of nozzle 18. While Hawthorne does not discuss this parameter, *per se*, a review of the Figures of Hawthorne reveals that the length of mixing chamber 10 is in fact much greater than two times the diameter of the opening of the first nozzle, and thus does not anticipate the present claims.

Rejection of claims 2 and 10 as obvious in view of the combination of Hawthorne with Blange

Applicant respectfully submits that, because Hawthorne does not disclose a device meeting the requirements of claim 1, the combination of Hawthorne with Blange does not produce a device in accordance with the invention of claims 2 or 10.

In addition, Applicant respectfully submits that the Examiner is apparently mis-reading the language of claim 2. Claim 2 formerly recited that the length in flow direction of the mixing chamber is such, that taking into account the divergence of the jet to be discharged from the first nozzle, the diameter of the jet leaving the mixing chamber is smaller than the diameter of the second nozzle opening. Claim 2 has been amended as described above, in order to clarify which dimension is the subject of the claim, namely the distance between the exit opening of the first nozzle and the entry opening of the second nozzle, but the recitation of the claim remains the same. Specifically, claim 2 recites that the *mixing chamber* should not be so long—in the direction of primary flow—that the fluid stream disperses to a width that is greater than the

dimensions of the inlet of the second nozzle. The Examiner's statement that, "It would be obvious. . . to have a second nozzle opening having a larger diameter than the diameter of the mixing chamber exit," does not appear to be relevant to the claim limitation in question.

Neither Hawthorne nor Blange makes any teaching relating the length of the mixing chamber to the diameter of the jet leaving the mixing chamber and Applicant submits that the claimed limitation is not an obvious modification of either reference. Applicant therefore requests that this rejection be reconsidered and withdrawn.

Rejection of claims 5 and 6 as obvious in view of the combination of Hawthorne with Woodson

In support of this rejection, the Examiner asserts that Woodson teaches 2 nozzles having different centers. Applicant respectfully disagrees. Woodson teaches two (or three) nozzles that are not parallel, but Woodson does not teach eccentric nozzles. Rather, the axes of the Woodson bores 27, 42, and 46 coincide at a single point. Thus, at that point, the bores of the Woodson device are concentric. For this reason, Applicant respectfully requests that this rejection be withdrawn.

Conclusion

Applicant believes that the amended claims are allowable over the art of record and therefore requests that the Examiner reconsider and withdraw the rejections. If the Examiner feels it would be helpful to discuss any aspect of this case with the undersigned, he is encouraged to telephone the undersigned at (713) 241-1041.

Respectfully submitted,

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